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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/604,824	06/27/2000	Jeffrey C. Schroeder	FL001	4570

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EXAMINER

MANNING, JOHN

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/604,824	SCHROEDER, JEFFREY C.	
	Examiner	Art Unit	
	John Manning	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-88 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 34-88 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to the amended claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues, "...unlike Applicant's invention, both a local television broadcast station 12 and a local cable service provider 14 are necessary in order to effect the system and method of his invention. (Baron, Col. 5, lines 28-30). Applicant's claimed invention is not so limited." The weather information/parameters is gathered at the computer 16 is sent via the VBI of the broadcasted television signal. The VBI of the broadcasted television signal is merely a communications path to the local cable service provider 14. Applicant's claimed invention does not preclude "both a local television broadcast station 12 and a local cable service provider 14". Applicant argues, "the local television station 12 and the accompanying television signal do not originate from the same plurality of geographic locations as the weather sources 18, but rather receives such data from various locations depending on the data being received." Baron ('774) is now relied upon to teach the plurality of geographic locations (See Col 6, Lines 43-58).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 34-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baron et al. (US Pat No 5,940,776) in view of Baron Sr. et al. (US Pat No 6,275,774).

With respect to claims 34 and 75, the claimed system and method for integrating wind direction and wind speed or "at least one weather parameter" into a television broadcast related to a first geographic location is taught by Baron ('776) as can be seen in Figure 1. The claimed limitations of "a portable monitoring station" "the monitoring station including, means for sensing the weather parameters", "generating weather parameter signals representing the weather parameters" and "means for transmitting the weather parameter signals from the monitoring station" is met by Items 16, 18 and 57 of Figure 1. "The local television broadcast station 12 includes a host computer 16 that is in communication with a plurality of weather data sources 18, though only three such weather data sources 18 are shown for illustrative purposes. The three weather data sources 18 shown in FIG. 1 include a National Weather Service (NWS) weather wire message service, a lightning strike data service, and radar" (Col 5, Lines 30-34). The claimed limitations of "a base station including, means for receiving the weather parameter signals from the monitoring station, and for providing the weather parameter signals to the base station, means for generating icon signals representing weather parameter icons in response to the weather parameter signals, the weather parameter icons representing the weather parameters" and "means for converting the icon signals into television signals representing the weather parameters, the television signals being in a format suitable for integration into the television broadcast signals" is met by Item

14 of Figure 1 (Also see Figure 8). "The meteorological data comprising the data stream is processed and combined with bitmaps of geographical and topographical views to generate real-time weather images, as indicated at module 126. Next, textual information is added to the weather images, typically as crawling or scrolling messages, as indicated by block 128. At block 130, the weather images are converted into a television compatible format for broadcast to subscribers. As previously mentioned, suitable television formats include NTSC and PAL. Lastly, at block 132, the television compatible signals are broadcast to subscribers on dedicated channels for continuous viewing" (Col 10, Lines 43-54; Also see Col 8, Lines 61-67 and Col 9, Lines 1-56).

Computers are inherently portable; consequently, host computer 16 is portable. Baron ('776) fails to explicitly disclose monitoring stations in a plurality of geographic locations and production switching means for combining a first icon signal representing weather patterns with first television signals at a first location and combining a second icon signal representing weather patterns with second television signals at a first location with selecting an corresponding output televisions signal. Baron ('774) teaches monitoring stations in a plurality of geographic locations and production switching means for combining a first icon signal representing weather patterns with first television signals at a first location and combining a second icon signal representing weather patterns with second television signals at a first location with selecting an corresponding output televisions signal so as to notify site specific users affected by inclement weather specific to a geographic location (See Col 4, Lines 6-30; Col 6, Lines 43-58, Col 9, Lines 11-26, Col 10, Lines 33-44). Consequently, it would have been obvious to one of

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ordinary skill in the art to modify Baron ('776) with production switching means for combining a first icon signal representing weather patterns with first television signals at a first location and combining a second icon signal representing weather patterns with second television signals at a first location with selecting an corresponding output televisions signal for the stated advantage.

Claims 35-36 and 76-77 are met by that discussed above for claims 34, 36, 75, and 77. The disclosed continuously updated (i.e. real time) weather icons vary with respect to the weather condition (See Col 7, Lines 11-34; Col 8, Liens 61 – Col 9, Line 56).

In regard to claims 37-39 and 78, the aforementioned combined teaching fails to explicitly disclose wireless communication between the monitoring stations and the base station using cellular or UHF frequencies. The Examiner takes Official Notice that it is notoriously well known in the art to utilize wireless communication using cellular or UHF frequencies so as to increase the versatility of the system. Furthermore, cellular and UHF are high frequency which means they have a physically short wave. Since the size of transmission and reception equipment (particularly antennas) is related to the size of the wave, smaller, less conspicuous antennas can be used than with VHF or lower bands. It would have been obvious for one skilled in the art at the time of the invention to modify the system and methods of the combined teaching by using wireless communication between the monitoring stations and the base station using cellular or UHF frequencies for the stated advantage.

In regard to claim 40 and 79, Baron ('776) discloses the weather parameter including wind speed and direction in real time (See Col 7, Lines 11-34; Col 8, Lines 61 – Col 9, Line 56). Figure 6 explicitly shows wind speed and direction (i.e. "NNE – 15 mph"). Alternatively, Figure 5 shows a weather animation representing the movement of a storm, which is indicative of wind speed and direction.

Claim 41 is met by that discussed above for claims 34, 36, 75, and 77. The disclosed system and method is automated and real-time. The television signals that represent the weather conditions change as the weather changes.

In regard to claims 44, 80, and 81, Baron ('776) discloses the weather parameters are monitored in real time (See Col 5, Lines 25-44).

In regard to claim 42-43 and 80-81, the claimed limitations of "time-multiplexing means for establishing communications between the monitoring... and base stations" and "polling the monitoring station, for the continuous monitoring of changes in the weather parameters over time" is disclosed by Baron ('776). "The host program 20 reads in the meteorological data received at each of the input ports 34 and multiplexes the data into a single serial data stream for transmission to the VBI inserter 21 by way of the VBI output port 38. Specifically, the host program 20 continually polls the input ports 34 for meteorological data" (Col 6, Lines 25-30).

Claims 45 and 82 are met by that discussed for claims 34 and 75 (See Col 6, Line 63 – Col 7, Lines 53; Col 9, line 30 – Col 10, Line 26).

In regard to claims 46 and 83, the combined teaching fails to disclose the use of advertising icons. However, the examiner takes Official Notice that is notoriously well

known in the art to use a advertisement icons so as to generate revenue for the service provider. Consequently, it would have been obvious to one of ordinary skill in the art to modify the combined teaching for the stated advantage.

In regard to claim 47, the combined teaching does not explicitly teach the claimed "interrupt logic for servicing interrupts generated by the sampling means." The Examiner takes Official Notice that ISR routines were notoriously well known in the art at the time of the invention. Moreover, ISR's are well known for use during data sampling or processing in order to allow other functions to be performed by a processor while waiting on data collection or transmission. It would have been obvious for one skilled in the art at the time of the invention to modify the system and methods of the combined teaching by using ISR logic in order to allow multiple tasks to be performed, thus speeding up overall task execution.

In regard to claims 48 and 62, the claimed ISR are met as previously noted. The combined teaching does not teach "switch logic responsive to an operate... for configuring and programming the microcontroller." Examiner takes Official Notice that switch logic to configure and program microcontrollers was well known in the art at the time of the invention. This was seen throughout the industry using electronically programmable ROM's that may be rewritten/configured as necessary. It would have been obvious for one skilled in the art at the time of the invention to modify the system of the combined teaching by including switch logic to configure and program a microcontroller in order to allow a system that can be updated and reconfigured according to varying system needs.

In regard to claims 49-51 and 63-65, the combined teaching does not teach the claimed poll-select "protocol interrupt logic for coordinating and executing" multi-point series communication to deliver the data from the microcontroller to the base station. The combined teaching does teach multi-point serial communications for delivery in col. 6: 17-30 and seen in Fig. 1, but not use of poll-select "protocol interrupt logic." Examiner takes Official Notice that protocol interrupt logic was notoriously well known in the art at the time of the invention. It would have been obvious for one skilled in the art at the time of the invention to modify the system and methods of the combined teaching by using poll-select protocol interrupt logic in order to allow multiple tasks to be performed, thus speeding up overall task execution.

In regard to claims 52 and 66, the claimed "microcontroller further includes operator interface means coupled with the microcontroller" is seen in Figure 2 with the monitor 28.

In regard to claims 53 and 67, the claimed operator interface "enables a selective display of status conditions of the monitoring station" is taught in Col 6, Lines 7-24.

In regard to claims 54-55 and 68-69, the claimed "operator interface enables selection of the monitoring station to be sampled" is taught in the previously noted sections with station conditions selectable to produce screens.

With respect to claims 56 and 70, the claimed operator interface including "at least one remote status window for the monitoring station coupled with the base station, for displaying status conditions and sampled data to the operator" is taught in previously cited sections and seen throughout the figures.

With respect to claims 57-58 and 71-72, the claimed interface including "means for controlling the sampling and display of the monitoring station, and... setting graphic parameters and for controlling display of icons associated with the monitoring station" is see Figures 2 and 3. Various control screens are provided to enable operator inputs to select "sampled data from the monitoring station" to display the graphics as seen throughout the Figures and previously noted.

With respect to claims 59-60 and 73-74, the claimed use of "protocol interrupt logic for coordinating and executing communication of the sampled data... for refreshing" to provide up-to-the-minute display of weather signals is not taught by the combined teaching. The combined teaching teaches real time updating and selection of remote stations to display conditions as previously noted, but not the use of "protocol interrupt logic." Examiner takes Official Notice that protocol interrupt logic was notoriously well known in the art at the time of the invention. It would have been obvious for one skilled in the art at the time of the invention to modify the system and methods of the combined teaching by using poll-select protocol interrupt logic in order to allow multiple tasks to be performed by, thus speeding up overall task execution.

Claim 61 recites similar limitations in part to claim 34 above. Further limitations parallel those addressed in response to claim 47 above. It would have been obvious for one skilled in the art at the time of the invention to modify the system and methods of the combined teaching by using ISR logic in order to allow multiple tasks to be performed, thus speeding up overall task execution.

The recited limitations of claims 84 and 86-88 are met by Figure 3 (see Col 7, Lines 35-67).

In regard to claim 85, the incoming weather signal is multiplexed; therefore the monitored signal is selected.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Manning whose telephone number is 571-272-7352. The examiner can normally be reached on M-F: 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JM
May 30, 2006



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